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ABSTRACT

This handbook contains broad guidelines to assist both businessmen and educators who are interested in increasing industry-education cooperation through the creation of an Industry-Education Council. This guide is part of a series of reports designed to encourage the participation of businessmen in areas such as school management, curriculum development, and methodology. Material in the handbook discusses briefly the need for increased cooperation among schools, business, and industry; suggests that the Industry-Education Council is the best structure to deal with this need; itemizes the initial steps required to start a Council; suggests several types of cooperative activities and identifies their broad goals and objectives; and provides examples of bylaws and statements of purpose used by existing Councils. (Author/DN)

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INDUSTRY- EDUCATION COUNCILS

A Handbook

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U.S. DEPARTMENT OF HEALTH,
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Preface

This *Handbook* contains broad guidelines to assist both businessmen and educators who are interested in increasing industry-education cooperation through the creation of an Industry-Education Council. It follows the publication of four Public Policy Reports by the Education Committee of the National Association of Manufacturers in 1971. The underlying theme of these Reports is to encourage the participation of businessmen in areas such as school management, curricula development, and methodology. Endorsement of the Association's proposals by industry and education leaders has highlighted the need for more information on how to develop a community-level mechanism to serve as the connecting link between the world of work and the world of the classroom.

This *Handbook* discusses briefly the need for increased cooperation between schools, business and industry; suggests that the Industry-Education Council is the best structure to deal with this need; itemizes the initial steps required to start a Council; suggests several types of cooperative activities and identifies their broad goals and objectives; and provides examples of bylaws and statements of purpose used by existing Councils.

All of this material is drawn from actual, tested experience gained in different parts of the nation, but it is primarily "get started" information rather than a detailed blueprint of the way to operate a Council. Business and education leaders in individual communities should add to and subtract from these suggestions according to the nature of their own problems, circumstances, and experiences.

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I. AN INTRODUCTION TO INDUSTRY- EDUCATION COUNCILS

Education and industry do not know each other well enough. In fact, there is a wide communications gap. All too frequently schools develop and initiate courses and programs without ever considering manpower needs and requirements or seeking the advice and help of local business leaders. This results, often, in students being ill-prepared to maximize career opportunities.

This communications gap is so large that businessmen are likely to believe the only assistance educators want from them is dollars. The misunderstandings cannot be resolved and the significant advantages of industry-education cooperation cannot be appreciated through the occasional plant tour, once-a-year seminar and one-time-only projects. As communications between education and business have grown increasingly complex, the need for a connecting link to serve as a forum and to initiate jointly-developed programs of action has become more obvious. Continuous communications between businesses and schools are necessary if mutual understanding is to be increased and if students are to receive adequate preparation.

It has always been difficult for students to make the transition from the classroom to the world of work. Despite efforts to help them become aware of the real role that business and industry play in creating a better world, various surveys have indicated that as many as two-thirds of high school students do not believe that business is competitive or needs to earn a profit. Students need realistic perceptions of the world of work, good quality, up-to-date educational programs to facilitate their entrance into that world. The ultimate success of schools depends upon their ability to provide these opportunities. The availability of such learning experiences can be increased by recognizing that work and education are so inter-related that neither can exist in isolation from the other.

The public elementary and secondary schools are big business, with nationwide expenditures of \$48 billion in 1972. The growing concern among various segments of the public suggests the existence of serious problems which the schools seem unable to resolve alone.

In order to deal with these problems, many are suggesting that schools should search for and consider methods of increasing productivity, and become more accountable for student achievements. The business community has some skills and know-how which can be of value to educators as they make the necessary adjustments required by changing times and conditions and, too, the business community has educational resources which can help students and teachers increase their understanding of the world of work.

In some communities, the cooperative activities of education and industry have been increasing and mutual problems have been resolved. Outward-looking educators have sought aid from the business and industrial community. Business leaders, motivated by self-interest and by a sense of community responsibility, are increasingly searching for ways to help schools and students prepare for the future. Many corporations, acting individually, are involved in "partnerships" with one or more schools or provide supplementary educational materials. This utilization of industrial resources has helped teachers provide students with knowledge, skills, and understanding not normally possible in the classroom. However, too often a request for assistance and cooperation comes from a single teacher or school to a single business firm.

The fact is that some educational problems do not lend themselves to solutions by the response of a single business firm. Experience in several communities indicates that when the resources of many firms and those of the local school system are linked, solutions are found to long-standing problems. All too frequently there is little coordination within a school district and existing industry-education activities. Those which prove highly successful are not always made available to other schools with similar problems or needs. Coordination at the local level through an independent organization, serving as a link between industry and education, seems highly desirable and necessary. Sustained, collaborative efforts can be provided through an Industry-Education Council.

- An Industry-Education Council is a mechanism which will broaden the base of corporate support for relevant schooling and channel industry and school resources toward the solution of mutual problems.
- It brings all the educational resources within a community together.

- It serves as a system-wide umbrella for coordinating industry-education cooperative efforts.
- A Council serves as a continuous forum for representatives of industry and education to discuss mutual interests.
- It promotes and encourages communication and cooperation between industry and schools and helps improve the total educational program.
- It mobilizes the key resources of a community; develops plans for their efficient allocation, and provides a greater opportunity to achieve program objectives.
- A local Industry-Education Council offers industry an opportunity to help ensure that tomorrow's adults will be equal to their challenges and opportunities; that they will appreciate and understand their responsibilities as citizens; be competent in managing their own personal affairs and successful in their chosen careers.
- A Council offers educators an opportunity to strengthen the instructional effort at all levels of education through an applied approach to concepts and principles which relate classroom teaching to the world of work and career fields, and to develop and maintain curricula relevant to current and anticipated employment opportunities.

II. FORMING AN INDUSTRY-EDUCATION COUNCIL

The most difficult part of any new effort is the initial step. Even where school and industry leaders already believe cooperation to be desirable, the initial steps often prove to be difficult.

Getting Started

Past efforts to organize Councils demonstrate two characteristics which are required at the beginning: (1) There must be at least one interested, enthusiastic person, either from school or industry, to take the initiative; (2) Leadership and planning must come from both industry and education.

In one community this key person may be a corporate executive from any one of many types of industry or business. In another, the spark for action may be struck by a school administrator who has established contact with key business leaders through a local service club or other community organization.

One of the best ways for this individual to make a start is to plan a luncheon for representatives of the business community, the school superintendent, and other key education administrators. The program should begin by having a representative of business and an educator discuss their educational concerns. Each should suggest ways in which cooperation would eliminate problems or improve the quality of education.

A strategy to consider in the formation of a Council should be discussed and this information distributed among interested businessmen and school administrators. Maintaining momentum in the beginning has proved to be critical, with school board members playing a vital role at this point.

Setting Objectives

The formation of a small committee is an appropriate way to develop a statement of purpose and objectives. The objectives and techniques of operation of the various industry-education councils are as diverse as the interests of the school systems and industrial

organizations involved. (See Appendix A for sample Statements of Purpose.)

The representatives of education and industry should consider the following questions in determining their objectives:

- What constitutes an industry-education cooperation program?
- What organizations or groups are currently engaged in industry-education activities? Information is needed about their general purpose; extent and type of cooperative activities; methods of operation; quantity and quality of resources available for industry-education cooperation programs, e.g. school staff and business personnel, sponsored materials, etc.; grade levels and subject areas for which their programs are intended and the extent these programs have been used; and content of the programs.
- What are the priority areas where industry has special know-how and can provide the most needed assistance?
- How can an Industry-Education Council effectively mobilize community resources, and increase and improve their use in educational programs and projects?

Once agreement has been reached on general objectives, it is necessary to create an organizational structure and rules of procedure and governance. A general framework to allow flexibility is more important than precise rigid rules. Refinements in objectives and organization will come through the process of evaluation. In support of specific objectives and goals, various committees can be created. These might include: occupational information and guidance, economic education, community resource workshops, and in-service training.

Frequently, a Board of Directors or an Executive Committee consisting of key business leaders and top education officials is the policy-setting body. Other committees which may be required include: membership, finance, programs, and long-range planning. It is important that a cross section of the community's businesses and industries be represented along with the chief school administrator. (See Appendix B for sample Bylaws and Organizational Chart.)

Industry-Education Coordinator

Some school systems have designated high-level school administrators to serve in the post of Industry-Education Coordinator. In

such cases, this individual serves as the Executive Director of the Council. The appointment of an Industry-Education Coordinator or Director of School-Industry Cooperation by the chief school administrator provides the necessary linkage between an Industry-Education Council and the school district. This office is a funded activity of the Board of Education and demonstrates the visible type of commitment required from school officials for long-term industry-education cooperation, although a few communities finance Council activities independently of the school system.

The Industry-Education Coordinator directs the cooperative activities within the school district and works closely with the Council's Board of Directors. His background ideally should include work in industry, broad experience in educational theory and practice, as well as a strong interest in improving and expanding industry-education cooperation. The wide range of school programs and projects involving industry-education cooperation tends to require a professional educator to fill the Coordinator's or Director's position.

While it may be possible for noneducators to serve as the Executive Director, professional educators generally would not accept a representative of management, either retired or on a loan basis, as an option to a district coordinator because of the lack of formal preparation, particularly in the many specialized areas of education. He should have the responsibility to define, direct, and evaluate research in the industry-education cooperation field and to communicate effectively with a school district's faculty and administrators, industry, and the general public. A local Industry-Education Coordinator should maintain liaison with industry-education officials at the State Education Department, counterparts in other communities, and the U.S. Office of Education Industry-Education-Labor Coordinator in addition to an affiliation with the National Association for Industry-Education Cooperation.

School officials should allocate sufficient staff, budget, and facilities to carry out the cooperation function since it crosscuts every area of activity in the school system. Industry should respond with a commitment of its resources, a substantial number of personnel, special know-how, unique services, sponsored materials and, where necessary, additional financial resources to meet the objectives of the total industry-education cooperation program.

III. INDUSTRY-EDUCATION COUNCIL ACTIVITIES

To illustrate the variety of industry-education activities, five broad program categories and examples will be discussed: (1) Instruction and Curriculum Development; (2) Career Guidance; (3) Materials and Service; (4) Educational Management and (5) General Management Studies.

Instruction and Curriculum Development

Many of today's students are in an "academic no-man's land." Typical students in grades K-12 are offered a program that, for the most part, is academic and college oriented. Their options for occupational choice are limited. This situation has led to an increasing dropout rate and protests from industry that schools are not turning out students with employable skills. The Bureau of Labor Statistics has forecast that no more than twenty percent of all U.S. jobs in the 1970's will require as much as a bachelor's degree, and that "the remaining eighty percent will be within the reach of a high school diploma — or nondegree postsecondary schooling." Some predictions, largely based on the "general education" program, indicate the possibility that as many as ten percent of the students currently in elementary grades may never be gainfully employed.

A shift in curriculum development, instructional techniques and materials to a program that is relevant to the needs of both students and industry is required. Industry, as one of the consumers of the educational product, has an opportunity to take an active leadership role with educators in shaping the product that will eventually enter the job marketplace. An Industry-Education Council program geared to improving instruction and curricula can help students prepare for their dual roles as producer and consumer. It can help them understand the operation, functions and, above all, the contributions made by the private enterprise system.

An Industry-Education Council teacher-training/curriculum-development activity can be conducted within the framework of programs such as a Community Resources Workshop, In-service Training, and specific Curriculum Development Projects.

COMMUNITY RESOURCES WORKSHOPS

Businessmen, industrialists and educators in several states have devoted considerable time to developing community resources workshops. A workshop is an intensive college or university-credit summer course that offers elementary and secondary school teachers the opportunity to identify resources in their community that have educational value. The workshop demonstrates how to use these resources more effectively in classrooms.

Workshop formats are quite flexible, ranging from an examination of cultural resources in the community to developing teaching units to up-grade science education. During the course, the teachers visit industries and interview industry executives, often for the first time.

A workshop could have these objectives:

- To identify current and emerging career fields in business and industry and the educational requirements needed by students for these careers;
- To become acquainted with the major problems which face local business and industry through independent study and by contact with management;
- To gain an understanding of the world of work, using this experience to develop illustrations and demonstration materials to clarify classroom teaching-learning activities;
- To develop an understanding of the economics of the firm, and how economic principles are applied in real-life situations.

Three requirements are necessary to hold a Community Resources Workshop:

- Area teachers and school administrators must endorse the need for this type of program.
- A local or nearby college or university must be willing to grant graduate credit for this course.
- The business community, through the Industry-Education Council, must indicate initiative and willingness to spearhead efforts to bring the various community sectors together to discuss and plan the workshop.¹

¹This industry-education cooperation program is discussed in greater detail in the National Association of Manufacturers publication, *Community Resources Workshops: A First Step Toward Better Industry-Education Cooperation*.

IN-SERVICE TRAINING

Another activity for an Industry-Education Council is in-service training programs for teachers. The Council, perhaps through its committee on teacher training, can serve as a channel for directing and catalyzing required personnel and materials for special courses of study tailored to local needs and offered by a school district to its teachers. In-service training which utilizes community resources in the form of volunteer professionals from business and industry and other community organizations affords teachers a unique opportunity to keep up with the latest developments in a particular subject area.

The following are suggested areas for Industry-Education In-service Teacher Training Programs:

☐ *Economic Education*

Develop an applied approach to the teaching of economic concepts and principles, K-12. Conference leaders from business and industry conduct sessions at their sites on topics included in the curriculum: marketing, profits, money and banking, productivity, wage and price determination, etc. Economics of the firm (business economics) is presented, utilizing illustrations, examples, and case studies from local industry.

☐ *Consumer Education*

Provide teachers at all levels with relevant background from local sources on such subjects as: budgeting and money management, insurance, housing, transportation, credit, investment and wise shopping habits. On-site conferences with representatives of retailers, wholesalers, manufacturers and bankers give teachers an opportunity to interact with people involved in the consumer life of the community.

☐ *Career Awareness for the Elementary Grades*

A program designed to provide elementary school teachers with relevant background information on careers in business and industry in the local community, sources of career education materials, and techniques in developing career awareness among elementary students.

☐ *Career Development for Secondary School Subjects (Grades 7-12)*

A practical application of concepts and principles taught in science, home economics, math, business, and industrial arts. Teachers are

also oriented to careers and job skills associated with their specific discipline.

□ *Teacher Internship in Industry*

An orientation and updating of teachers to the world of work through on-the-scene, in-depth exposure to a broad spectrum of skills on a wide variety of occupations is important. School counselors should also be invited to participate because they need projections of changing manpower requirements in their career guidance activities with students. An Industry-Education Council can assist in the development of this type of survey in cooperation with the school district, area industry, government agencies, and other community employers. A survey of occupational skills can serve the needs of manpower planners, business firms, and community administrators in addition to educators.

□ *Curriculum Development*

Industry-Education Councils can play a vital role in assisting schools to develop relevant curricula at all levels for various disciplines by evaluating course offerings in terms of meeting current and projected area occupational needs; pointing out obsolete course material and suggesting new courses, particularly in the nonmandated curriculum, that can be tailored to local career opportunities. Councils can also assist in the development of manpower/occupational skills surveys in order to respond to current and emerging fields with appropriate curricula.

Career Guidance

Counselors require information about the opportunities, employment policies, and conditions in various career fields. They attempt to provide career information to noncollege-bound students to assist them in making an intelligent career choice. Yet, this procedure is limited in part because of the lack of exposure-courses on industrial, technical, and business topics which are offered in teacher colleges as part of the required training for certification. Most counselors do not have adequate information on available occupations.

There is a gap between the actual manpower demands and career opportunities available in business and industry and what guidance counselors know of these demands and opportunities. Thus, increased cooperation between industry and education is needed to improve the guidance function in school systems.

Through industry-sponsored in-service training for counselors, audio-visual materials, career guidance publications, career activities for students, and an occupational skills survey, schools can contribute to an improved career development counseling program which will:

- Provide insights into all aspects of major career fields in area business and industry, including job requirements, advancement opportunities, on-the-job training, etc.;
- Develop understanding of the organization, operations and teamwork in business and industry, e.g., manufacturing, banking, retailing, etc.;
- Help the student relate the world of work to his personal potential and become more aware of his options;
- Assist employers in helping to recruit high school graduates into career fields where there are shortages of qualified employees.

Suggested areas for industry-education cooperative activities and services which will improve the quality of career guidance follow.

IN-SERVICE TRAINING FOR GUIDANCE COUNSELORS

In developing occupational information on current and emerging career fields, focus should be on the leading businesses and industries in the community. A program would include: assessing the curriculum to determine if local manpower needs are being met; seeking industry's views on whether existing programs should be changed and the type of programs or revisions which seem desirable; developing procedures for dissemination and utilization of local occupational information; and providing an opportunity for industry representatives and counselors to discuss each other's functions and problems.

The format described in the Community Resources Workshop and Teacher In-service Training Programs, especially the on-site conferences hosted by business and industry personnel, is adaptable to this objective. Programs or sessions can be conducted on a monthly basis during the school year or during the summer.

CAREER GUIDANCE SERIES

In developing audio-visual resources to provide students with current information about career fields in the community or region, the target audience should be secondary school students (grades 7-12).

A variety of media should be considered for this project: video

tape, cassette, film, filmstrip-record, and tape. The content of a typical series should include: an overview of the organization of a company (nature of the business, size of the labor force); interviews with employees for selected entry level jobs, describing the type of work, qualifications, advancement opportunities, etc., and an interview with the firm's personnel director. A well-planned series can bring the local business and industrial community into the classroom.

CAREER GUIDANCE MEETINGS

The format can vary between a single employment-information day in one school for senior high school students to a series of two or three evening career meetings or fairs in which all junior and senior high school students and their parents gain a realistic overview of several occupational fields. Local industries and agencies should provide adequate personnel to discuss career fields and assist students in developing the ability to determine educational requirements for a given career and how to communicate effectively with potential employers. Programs of this type are especially meaningful to underclassmen who still have an opportunity to select courses or programs that will assist them in achieving a realistic career goal.

SUMMER INTERNSHIP PROGRAM IN INDUSTRY

The purpose is to provide an in-depth exposure to a variety of job skills and to gain experience in performing and observing various types of job conditions. This on-the-scene exposure to employee situations will provide a kind of experience usually lacking in college courses leading to counseling certification. A closer working relationship between counselors and community firms is an added benefit of this activity.

Materials and Service Functions

SPONSORED MATERIALS

- Many companies and trade associations produce supplementary educational materials for use in the schools. These sponsored materials consist of a variety of printed materials as well as films, filmstrips, records and tapes. They cover subjects such as economics, consumer education, career information, personal hygiene, ecology, chemistry, science, natural resources, home economics, etc., and these materials serve as a valuable resource to supplement textbooks or other

units of study. They are particularly effective in providing information to students in subject areas where industry has achieved a high degree of specialization and expertise.

- A number of companies make available to schools surplus equipment and supplies for laboratory activities in science education, business courses, and industrial arts programs.

SERVICE

The service aspect of an Industry-Education Council should be interpreted broadly. It should include informational, promotional, and placement activities along with consulting services. The range of services provided by industry to the schools will depend on the circumstances and needs in a particular community and the extent to which these needs are being met by other community organizations.

An Industry-Education Council's services may include some or all of the following:

☐ *Consultation*

A clearinghouse of talented human resources needed by school systems for classroom discussions, field trips, surveys, and conferences. Educators and students benefit from contact with community resource professionals who manage and work within local industries, government agencies, trade associations, and other community institutions.

☐ *Community Resources Directory*

A Community Resources Directory is an asset to every educational program. This Directory should emphasize area industry, business, public agencies, governmental bodies and cultural centers which offer supportive services to the schools. It should include the identification of the person to contact to secure additional information or to get resource people for classroom visits.

☐ *Conferences and Institutes*

Conferences and Institutes can be conducted periodically in cooperation with school systems on subjects of mutual interest related to regional economic developments, urban problems, employment, and education.

☐ *Speakers Bureau*

Teachers and counselors need to be able to refer to this clearinghouse to secure qualified speakers on specialized topics.

☐ *Public Information*

This function can be accomplished through a newsletter on industry-education activities distributed to a selected mailing list of schools, businesses, agencies and community groups. In addition, it is sometimes appropriate to provide news and feature story releases to the local media.

☐ *Work-Study and Placement Activities*

Participation by industry in Work-Study Programs becomes more important than ever with the increasing emphasis in schools on career education. An Industry-Education Council can assist in expanding Work-Study Programs to meet the needs of more students and local business firms.

☐ *Field Trips*

A well-planned Field Trip that has a definite learning objective enables students to observe the world of work, occupations, and the contribution industry makes to an area's economy. Observing the functions of various industries and businesses extends the student's concepts and understanding of principles taught in the classroom. The Field Trip should have a direct application to an instructional activity in the classroom. Industry and other institutions can provide, through visits to their facilities, an opportunity for students and teachers to explore the dimensions of experiences, problems and processes related to the world of work.

Educational Management

An industry-education cooperative Management Training Program is a high priority function of the Council. Industry can assist school personnel in measuring educational productivity and effectiveness through the application of business management techniques. This is a step toward accountability being sought in education today.

Experiences in other communities indicate that business organizations have employees who possess qualities and capabilities that are needed to solve some educational management problems. Business executives have experience in such areas as: accountability, finance, organizational training, goal setting, projecting, innovation, and productivity measurement. Personnel qualified in these and other areas can be made available through an Industry-Education Council.

The following topics are suggested as areas in which there are

definite applicability of business management skills and techniques to management problems of a public school system.

MANAGEMENT BY OBJECTIVES AND/OR MANAGING FOR RESULTS

Public school systems, school board members and school administrators are frequently faced with more needs than can be met with available resources. At the same time, new challenges requiring new types of responses, are constantly arising. Typical questions faced by administrators are:

- Of the many needs, which deserve highest priority?
- What is the best course of action among the various alternatives available to resolve a specific problem?
- How long will it take to develop and implement a program to meet a particular need?
- What resources (personnel and facilities) are available?
- What outside resources are available for getting the job done?

In utilizing an educational management by objectives approach, industry and schools can improve the capacity of the school system to develop programs that are result oriented. Businessmen can be of assistance by helping identify program requirements in terms of staff, facilities, equipment, materials, and costs; developing a time schedule for implementing and administering the program; and developing a plan for evaluating the results of the program in terms of specific objectives.

SCHOOL STRUCTURE

Schools cannot meet the changing requirements of society with an inflexible organization structure. Changes in the school system's organization can frequently enable school managers to improve productivity, increase quality and respond to the mounting public demand for accountability based on results. Industry can provide helpful assistance in this area by establishing training programs for school personnel to discuss the relationship of objectives and organization, modern theories of organization, types of organization, criteria for effective organization, and power allocation within an organization. Participants can examine organizational levels; the manager's span of control; leadership roles; administrative functions and their impact; key result areas and methods for measuring success.

In sum, community employers can offer educators insights into applying organizational concepts and principles to the specific needs of a school system. With these resources, educators can analyze their present organization in workshop session and be expected to develop an organization based on sound result-oriented management principles.

SHORT-TERM AND LONG-RANGE PLANNING

Industry can provide training assistance for administrators and Board of Education members in short-term and long-range planning techniques. An Industry-Education Council can help school officials look at the basic nature of planning, the several kinds of plans which must be made, evaluated and updated on a regular and continuous basis. Businessmen can provide know-how in the planning effort by focusing on research and development, psychological factors, empirical methods in approaching a problem, alternative courses of action, and testing to improve accuracy. School personnel have the opportunity to apply new approaches to the questions: Why plan? When to plan? How to plan and when to re-plan?

ANALYZING PROBLEMS AND MAKING DECISIONS

Educational administrators, like business managers, have a basic job responsibility for critical analysis of problems and effective decision-making based on these analyses. Businessmen have unique expertise in identifying problems, gathering facts, evaluating alternative choices and making effective and workable decisions in terms of productivity, results, and accountability. This experience, shared with educators, can provide insights into scientific problem analysis and effective decision-making.

OTHER SUBJECT AREAS

Some other areas can be included in an Industry-Education Council sponsored management-training program. A few examples include:

- Motivation in management
- Organizational leadership
- Managerial teamwork
- Improving senior-subordinate relationships
- Computers in educational management
- Management information systems for education

GUIDELINES

The following are suggested guidelines in considering management training programs.

- An administrative or management training committee of the Industry-Education Council should have the responsibility for developing a cooperative program with a committee of school staff on specific areas of need as expressed by the educators.
- The Industry-Education Council's committee should provide expert management professionals.
- Scheduling is an important factor. Late afternoon or weekend sessions provide the best opportunity for good attendance.
- The format should include workshop sessions and case studies to create a real life problem-solving experience.
- If possible, the conference session should be held at the site of the organization conducting the program. It affords the participants an opportunity to become more acquainted with the "working environment" of industry. Also, some of the more sophisticated instructional resources available in industry can be effectively utilized.
- The Council committee should seek feedback from the participating group throughout the program since educators will be sensitive to how well the instructional staff from industry relates to school personnel.
- Members of the Board of Education should be invited to participate. School administrators rarely have an extended opportunity to interface with Board members and participate in situations on a teamwork basis. Involvement of Board members provides them an opportunity to observe at first hand the advantages of an industry-education cooperative activity.
- An evaluation of each set of conferences on a specific topic should be made to determine how well the program objectives were achieved, and to what degree the conferences met the expectations of the participants.

The payoff will depend on how well the course is tailored to the needs of the school system and on the opportunities provided the participants to apply business management concepts and principles to educational management in workshop sessions.

Management Studies

Industry, with its profit-and-loss discipline, can serve a useful role in advising a school district on a wide range of functions with similarities to business operations. In many areas, the application of modern business techniques can give the school district a greater return on its tax dollars.

GENERAL PURPOSE

A management task force, coordinated by an Industry-Education Council, can be organized for the purpose of conducting an in-depth investigation of the various aspects of business operations used in a school system. This service on the part of the private sector will provide education officials with consultants who can advise school personnel on sound business practices for operating their system. This industry-education cooperative project is particularly applicable to large school districts because of their similarity to corporate operations.

A management study may examine areas such as:

- Personnel practices and procedures
- Finance, budgeting, and accounting
- Facilities and maintenance
- Materials (purchasing, inventory, warehousing, distribution)
- Food service
- Organization, information and management systems and controls

GUIDELINES

One approach to council-sponsored management studies would include the following steps:

- Form a task force to include one operating team for each area under study.
- Identify area business professionals who are willing to participate in the study and the preparation of the final reports.
- Identify school staff members who should be involved with each team.
- Select a team leader.

- Coordinate the team leaders on methodology for data gathering and the format for reporting.
- Establish a time schedule for each area to be studied.
- Teams in the task force should meet with appropriate school personnel during the study and while writing the final report.

While the task force approach to a school system's business operations is a most comprehensive industry-education cooperation activity, an Industry-Education Council can provide limited consulting services as requested. Examples of these might include assistance with:

- Collective-bargaining procedures
- Developing an employee performance evaluating program
- Mobilizing public support for raising the school tax limit, school budgets, and bond issues.

Appendix A

STATEMENTS OF PURPOSE FOR AN INDUSTRY-EDUCATION COUNCIL

The purposes of the *National Association for Industry-Education Cooperation* are:

1. To provide a national organization for representatives of business, industry, education, government, and labor to promote increased levels of cooperation;
2. To identify areas of mutual interest and to formulate programs and procedures which meet acceptable standards;
3. To communicate with any group concerned with education about cooperative programs and projects.

The purposes of the *New York Regional Council for Industry-Education Cooperation* are:

1. To provide an organization for representatives of business and industry in the New York regional area who are working in the field of educational relations;
2. To consider ways in which the industrial community in the New York region can cooperate with local educational organizations, and to continue to develop and promote high ethical standards in such relationships;
3. To formulate plans and procedures whereby business and industry assistance is provided in accordance with acceptable educational standards;
4. To ascertain and identify school and other educational requirements to which business and industry might devote cooperative assistance efforts;
5. To foster adherence to educational standards and criteria in the development of useful and acceptable business-sponsored instructional materials;
6. To ascertain how educational organizations can assist business and industry in their efforts to cooperate with school systems;
7. To communicate with educators and the general public

on the mutual advantages of industry-education cooperation.

The objectives of the *Arizona Business-Industry Education Council* are:

1. To increase awareness among students of the rewarding career opportunities available in business and industry;
2. To intensify interest among business and industry leaders in encouraging students to prepare for careers in business and industry;
3. To expand the knowledge of educators in the State of career opportunities available in business and industry and the qualifications necessary for such careers;
4. To increase appreciation and understanding among parents of the advantages to students in preparing for careers in business and industry;
5. To make the resources and facilities of business and industry available to educators;
6. To foster the principles of our American profit-motivated free enterprise system;
7. To maintain a closer and continuing relationship between the education and business-industry communities in areas of mutual interest.

Goals used by other Industry-Education Councils include the following:

1. Establish effective lines of communication between industries, businesses and school systems;
2. Develop a positive attitude on the part of educators and businessmen to encourage the integration of industry, business and the community in the schools;
3. Compile information that will aid in determining specific manpower needs;
4. Prepare and disseminate occupational information for use by students and teachers at all levels;
5. Encourage all teachers to view career development as an integral part of each student's growth;
6. Encourage business leaders to assist educators in preparing students to become responsible adults;

7. Help school administrators utilize new management techniques;
8. Perform other appropriate functions requested by school districts or industries;
9. Assist schools in providing all interested students with realistic training for careers in business and industry.

Appendix B

BYLAWS FOR AN INDUSTRY-EDUCATION COUNCIL

Article I (Name and Purpose)

Section 1. The name of this organization shall be the
Industry-Education Council. It is hereinafter referred to as the
Council.

Section 1. The Council shall be a nonprofit corporation chartered
under the laws of the State of and its pur-
poses are educational in nature.

Section 3. The general objectives of the Council are
(See Appendix A)

Section 4. The Council will pursue these objectives by working
with education officials to encourage the donation of personal
time and knowledge, equipment, materials, displays, money and
other objects having educational value; by conducting special
programs, holding meetings or seminars for students, teachers
or school administrators or the general public; by advising or
consulting with educators of all types; and undertaking such
other actions and activities as shall be deemed advisable by
the Board of Directors.

Article II (Membership)

Section 1. Membership shall be sought primarily from businesses,
industries, schools and other appropriate agencies or organiza-
tions in the community(ies) of

Section 2. Memberships shall consist of two types:

(a) Industrial-Business Membership shall include: corporate or
other forms of organizations concerned with business,
commerce, manufacturing, mining, farming, transporta-
tion, or service enterprises including government agen-
cies; also professional, technical and scientific organiza-
tions including industrial trade and cultural associations.
Dues shall be at the rate of \$ per year.

(b) Educational Membership shall include individual schools
or school districts and county, regional and state school
offices. Dues shall be at the rate of \$ per year.

Section 3. Each membership shall be entitled to one vote and membership shall be conferred upon approval by the Board of Directors.

Article III (Membership Meetings)

Section 1. The annual meeting of the Council membership shall be held in the month of at a place and time designated by the Board of Directors.

Section 2. Written notice stating the date, hour and place of the annual meeting shall be delivered to each member not less than ten (10) days prior to the meeting date.

Section 3. Special meetings may be called by the President with the approval of the Board of Directors.

Article IV (Board of Directors)

Section 1. The Board of Directors shall consist of members who shall be elected by majority vote from the membership for a term of years with of the Board being elected each year at the annual meeting. Members of the Board of Directors may be reelected and shall represent both classes of membership.

Section 2. The nominating committee shall be appointed by the President and shall consist of at least three members only two of which may be members of the Board of Directors.

Section 3. The Board of Directors shall be the governing body of the Council and shall manage all affairs of the Council including the appointment of an Executive Director and other administrative personnel. A simple majority of the Board of Directors shall constitute a quorum and a simple majority of those present and voting shall be required for official action.

Section 4. The Board of Directors shall meet (monthly) (quarterly) or at any other time when notified by the President in writing as to the purpose, date and place of the meeting. Notification shall be ten (10) days prior to the date of such announced meeting.

Section 5. The resignation of a director for any reason may be accepted by a majority vote and any vacancy can be filled by action of the Board of Directors for the time remaining until the annual meeting.

Article V (Officers)

Section 1. The officers of the Council shall consist of a President, Vice President(s), Secretary and Treasurer.

Section 2. The terms of office shall be for _____ year(s) and the officers shall be nominated and elected at the annual meeting in the same manner as other members of the Board of Directors. Officers are eligible for reelection but the President may not serve two consecutive terms in that position.

Section 3. (a) The President shall be the chief executive officer of the Council, preside over all meetings of the Board of Directors and the Council.

(b) The Vice President(s) of _____ (membership, finance, projects, etc.) shall (spell out details of the function).

Section 4. The Secretary shall be responsible for all duties normally associated with this position including those directed by the Board of Directors.

Section 5. The Treasurer shall have responsibility for keeping the accounts of the Council and shall submit a report of the members at the annual meeting as well as such other times as required by the Board of Directors.

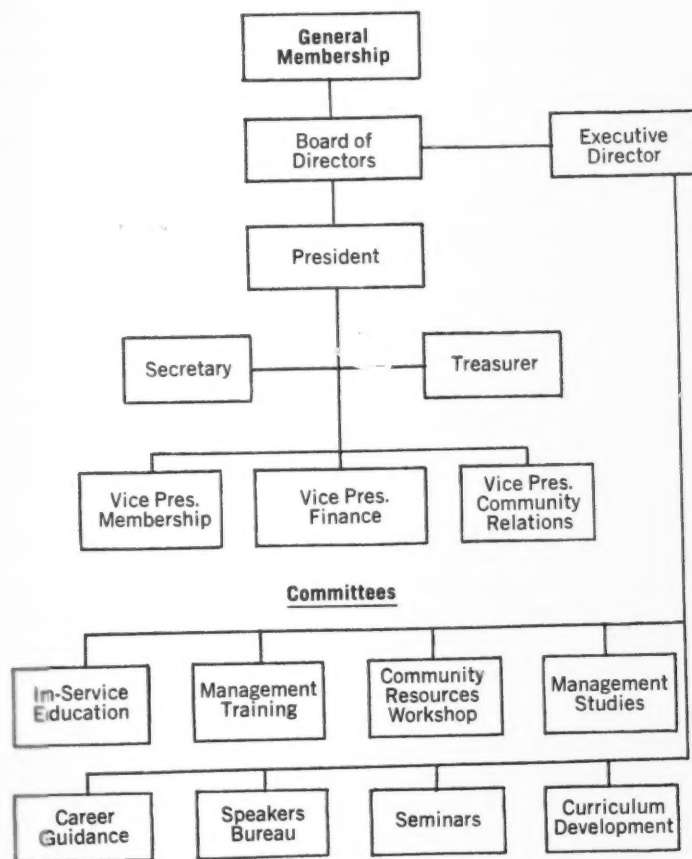
Section 6. Standing committees of the Council to be appointed by the President shall include: _____, _____, _____, _____, and the President shall appoint with the approval of the Board of Directors such other committees as seems necessary to achieve the Council's objectives.

Article VI (Amendments)

Section 1. Amendments to the Council Bylaws may be recommended by a majority vote of the Board of Directors. Such amendments may be submitted to the membership at the annual meeting or by written ballot to the membership at least thirty (30) days prior to the date on which action is proposed to take effect. The proposed amendment must be approved by a simple majority of the membership voting.

Appendix C

Anytown, U.S.A. Industry-Education Council Organizational Structure



Appendix D

Partial Listing of Industry-Education Councils and Coordinators

National Association
for Industry-Education Cooperation
Dr. Bertis E. Capehart, President
% American Iron and Steel Institute
1000 Sixteenth Street, N.W.
Washington, D.C. 20036

New York Regional Council
for Industry-Education Cooperation
Dr. Allen O. Felix, President
% New York Stock Exchange
11 Wall Street
New York, New York 10005

Northern California Regional
Industry-Education Council
Ivy Lee, Jr., Executive Vice President
235 Montgomery Street
San Francisco, California 94104

Southern California Regional
Industry-Education Council
Charles Horne, Chairman of Board
450 Grand Avenue
Los Angeles, California 90012

Arizona Business-Industry
Education Council
George Diefenderfer, Executive Director
26 East University Drive
Tempe, Arizona 85281

Central Jersey
Industry-Education Council
Bernard Novick, Director
71 Main Street
Woodbridge, New Jersey 07095

Mid-Hudson Career Development
and Information Center
Robert W. Schreiber, Director
88 Sargent Avenue
Beacon, New York 12508

Niagara Falls Industry-Education Council
Dr. Donald M. Clark, Executive Director
607 Walnut Avenue
Niagara Falls, New York 14302

Occupational Information Center
for Education-Industry
Dr. Beverly B. Johnson, Director
2970 Peachtree Road, N.W.
Suite 316
Atlanta, Georgia 30305

Washington, D.C. Industry-Education Council
Robert Kelly, President
% Modern Talking Picture Service, Inc.
2000 L Street, N.W.
Washington, D.C. 20036

Louis G. Mendez, Jr., Federal Coordinator,
Industry-Education-Labor
U.S. Office of Education
Washington, D.C. 20202

Robert J. Ullery, Industry-Education Coordinator
New York State Education Department
99 Washington Avenue
Albany, New York 12201

EDUCATION DEPARTMENT PUBLICATIONS

Community Resources Workshops (25¢)

Industry-Education Councils (50¢)

Student-Industry Plan for Action (25¢)

Education Policy Positions (n/c)

PUBLIC POLICY REPORTS (20¢ each)

Elementary & Secondary Education

Higher Education

Industry-Education Coordinator

Secondary Vocational Education

Copies may be ordered from:

**Education Department
National Association of Manufacturers
277 Park Avenue
New York, New York 10017**